



Transfer chains

Hard-wearing and durable

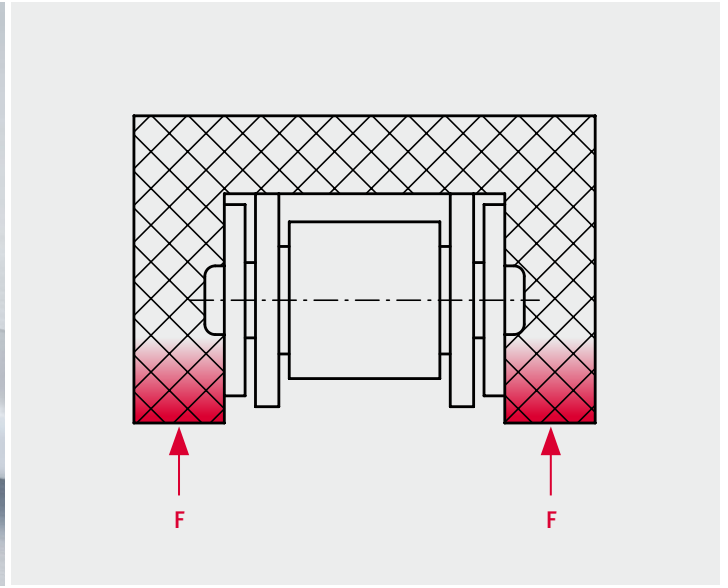
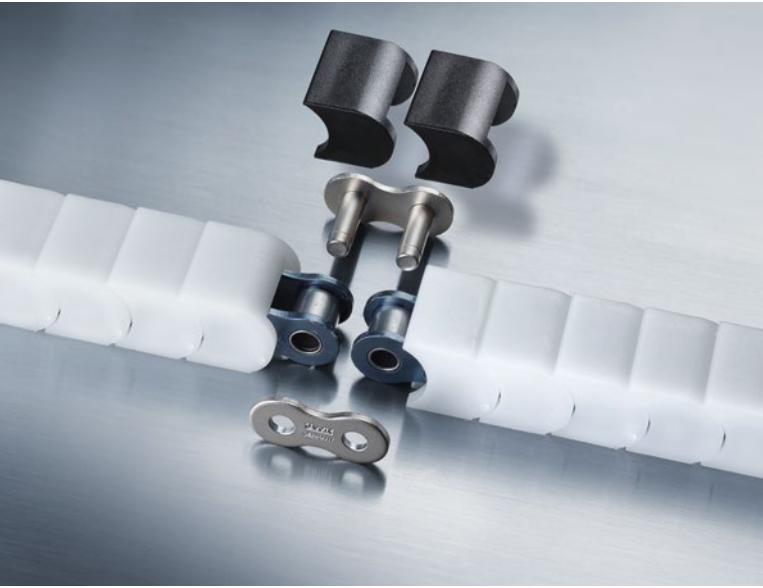
NEW
from iwis

Starting point: Open conveyor systems are susceptible to contamination by foreign bodies or small parts, which can cause belt malfunction or damage the goods on the conveyor.

Our solution: Fully enclosed parts conveyor (= TF) chains with wear-resistant, durable snap-on plastic attachments **in three versions** prevent malfunctions and damage.

Highlights

- All-round protection of functional components of the chain: attachments enclose the chain on three sides, even in the vicinity of sprockets
- Variety of base chains available e.g. **MEGALife**, nickel-plated or corrosion-proof
- Gentle handling of delicate goods
- Close-fitting covers prevent the risk of injuries and malfunctions
- Outside of the chain is absolutely clean, so there is no accumulation of dust
- Drive chain always remains clean, even under adverse operating conditions
- Suitable for horizontal and vertical installation
- No lifting of the load in the vicinity of the sprockets



Industry applications

- General mechanical engineering
 - Conveyor and warehouse technology
 - Packaging and food industry
 - Electronic components and PCB production
 - Electrical goods and household appliances
 - Medical devices and pharmaceuticals
 - Wood, glass and pottery processing
 - Chemicals and process engineering
 - Printing and paper industry
- ... and in all other applications that call for gentle handling.

The chain is particularly suitable for machine-processed parts – even items with sensitive surfaces.

Technical characteristics

Chain configuration

Depending on conveyor situation, friction coefficients of 0.1 to 0.3 are assumed for determination of the required chain tensile force. The friction coefficients refer to the contact between chain and chain guide.

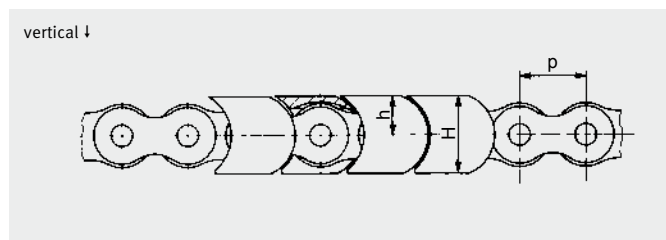
Base chain calculation is performed according to the examples set out in the iwis Chain Engineering Handbook or via the iwis chain calculation programme available on our website.

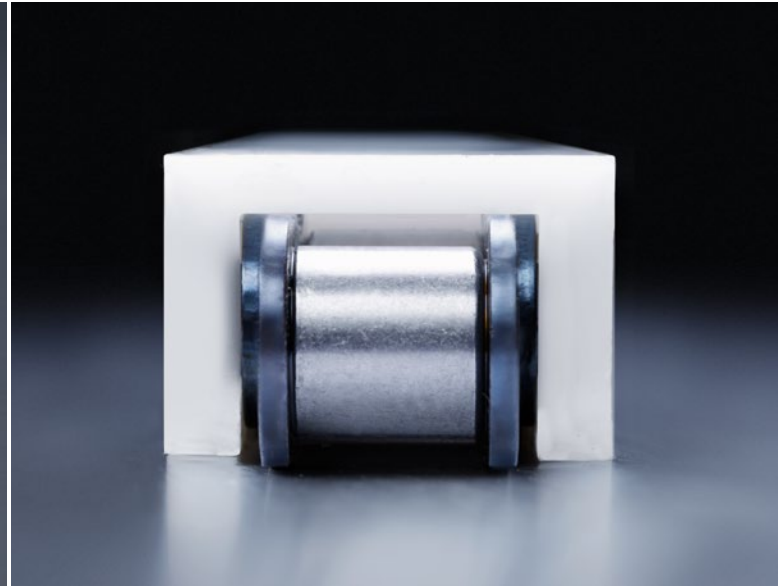
Important: TF roller chains are not riveted!

You can rely on iwis for help and support in case you have enquiries about details of chain design or CAD data. Please contact us if you need help.

DIN ISO No.	iwis designation	Pitch	Mean breaking load iwis (N)	Inner width inner link	Roller \varnothing	Attachment			Max. load per attachment (taking permitted surface pressure into account)	Max. permitted surface pressure vertical	Chain weight	Max. pull-off force acc. to iwis test
						Width	Height	Height above centre of pin				
		p (mm)	FB (N)	b1 min. (mm)	d1 max. (mm)	B max. (mm)	H max. (mm)	h max. (mm)	F (N)	(N/mm ²)	(kg/m)	(N)
08 B-1	L85SL TF*	12.7	22,000	7.75	8.51	19.85	15.5	8.1	137	0.45	0.84	200
10 B-1	M106SL TF*	15.875	27,000	9.65	10.16	25.0	17.6	9.7	195	0.45	1.18	300
12 B-1	M127SL TF*	19.05	32,700	11.75	12.07	29.8	19.9	11.3	265	0.45	1.59	620

*The suffix SL (Super Longlife) denotes base chains with especially wear-resistant pins





Attachment characteristics

iwis offers three attachment versions. The basic assumption for all temperature specifications is a max. surface pressure of 0.45 MPa; significantly higher temperature ranges are possible if surface pressure is lower. Please contact iwis in advance for advice.

Different material configurations are possible for special applications e.g. with gradients, accumulation or aggressive media. In these cases, please contact iwis for an individual advisory consultation.

1. Standard applications

Colour:	white
Water absorption ASTM D570:	0.22%
Rockwell hardness M-scale ASTM D785:	80
Surface resistance ASTM D257:	> 1.0E + 15Ω
Max. temperature short-term:	140 °C
Max. temperature constant:	100 °C
Min. temperature:	-50 °C

3. Antistatic applications

Colour:	white
Water absorption ISO 62 in normal climate:	9%
Surface resistance IEC 60093:	6.8E + 12Ω
Max. temperature short-term:	130 °C
Max. temperature constant:	90 °C
Min. temperature:	-40 °C

2. Heat-resistant applications

Colour:	white
Water absorption ISO 62 in normal climate:	0.25%
Ball indentation hardness ISO 2039-1:	130 MPa
Surface resistance IEC 60093:	> 1.0E + 15Ω
Max. temperature short-term:	150 °C
Max. temperature constant:	140 °C
Min. temperature:	-50 °C

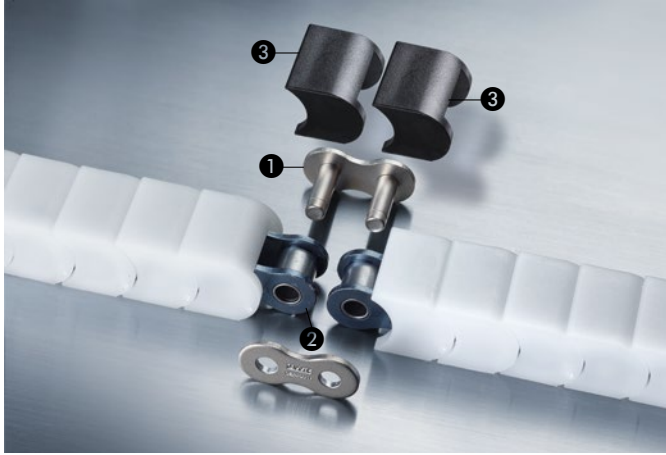
Material approval

Material	Standard	High-temperature	Antistatic
FDA approval ¹	✓	✓	✗
Silicone-free ²	✓	✓	✓
PWIS-free ²	✓	—*	—*
RoHS compliance	✓	✓	—*
REACH compliance	✓	—*	✓

¹For contact with foodstuffs ²Paint-wetting impairment substances

*Detailed information on PWIS, RoHS and REACH is available from your iwis contact.

Technical characteristics



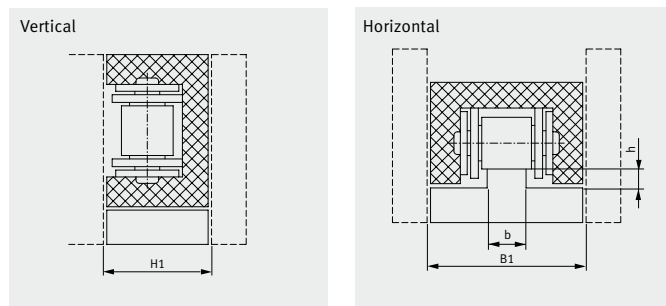
Connecting link

The chain ends are connected by a two-pin outer link block ① and a push-fit side plate ② pressed onto the pins. By bending the chain appropriately, the two attachments ③ can be clipped on over the pin. A locking spring is not required. The two relevant attachments are coloured black for easy location of the connecting link.

Chain guides

For iwis transfer chains installed horizontally, we recommend T-shaped chain guides to support the chain rollers. T-shaped chain guides are not required for vertical chain installation.

Chain	B ₁ mm	b mm	h mm	H ₁ mm
08B-1	20	7.5	3.1	15.6
10B-1	25	9.5	3.5	17.7
12B-1	30	11.3	3.9	20.1



Corrosion resistance / maintenance-free operation

Corrosion-proof CR chains, nickel-plated chains or low-maintenance **MEGAlife chains** with maximum service life can also be used as base chains for transfer chains. For more information on these chains, please refer to the catalogue "JWIS Precision chain systems for drive and conveyor purposes".

Lubrication

Selecting the right lubricant and the appropriate lubrication method guarantees minimisation of chain wear, adequate corrosion protection and optimum damping performance. Depending on the required application, the base chain can be treated with one of the iwis initial lubricants. For an overview of lubricants, please refer to the catalogue "JWIS Precision chain systems for drive and conveyor purposes".

Sprockets

Standard sprockets compliant with DIN 8187 can be used for TF chains. In the case of sprockets where $z > 18$, the TF chain is also completely enclosed in the vicinity of the sprockets and the drive chain is protected against the ingress of foreign bodies.

No lifting of the conveyed load in the vicinity of sprockets

